

Application No.: 10/762053

Case No.: 53912US011

REMARKS

Claims 1 to 59 are pending. Claims 1, 3, 7, 11, 13, 16, 18, 30, 34, 38, 39, 41, 44, and 46 are amended.

§ 112 Rejections

Claims 7, 34, and 39 stand rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants has amended each of claims 7, 34, and 39 to omit reference to "gram/mole" or "grams per mole" as suggested by Examiner. The amended claim language is definite and distinctly claims the subject matter and the rejection of claims 7, 34, and 39 under 35 USC § 112, second paragraph, should be withdrawn.

§ 102/103 Rejections

Claims 3, 4, 7, 13, 26, 27, 30, 31, 35, 41, 54-56 and 59 stand rejected under 35 USC § 102(b) as anticipated by or, in the alternative, under § 103(a) as being unpatentable over Robinson et al. (US pat. 3,241,662) in view of Applicants' disclosure at page 2, lines 21-26. Claims 1, 2, 5, 6, 8-12, 14-25, 28, 29, 32-34, 36-40, 42-53, 57, and 58 stand rejected under 35 under § 103(a) as being unpatentable over Robinson et al. in view of Applicants' disclosure and in view of Wong et al. (US pat. 4,451,533).

To anticipate a claim, a single prior art reference must teach each and every element of the claim. MPEP § 2131. To establish a *prima facie* case of obviousness, three criteria must be met. MPEP § 2143. There must be some suggestion or motivation to modify the reference or to combine reference teachings, there must be a reasonable expectation of success, and the references much teach or suggest all the claim limitations. MPEP § 2143.

Each of the amended independent claims requires a melt flow rate of greater than 8 grams/10 minutes and a tensile elongation to break of from above about 55% to 170%. These values are physical properties of the backing, which define the parameters of the backing Applicants regard as their invention.

Robinson et al. teaches a pressure-sensitive adhesive tape backing having a biaxially oriented, polypropylene backing and an adhesive firmly united to the backing. Robinson et al.

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identifies generally the reasons why biaxially oriented polypropylene is suited for tape backing. The advantageous properties identified are transparency, age-resistance, moisture resistance, tensile strength, and flexibility, to name a few.

Although Robinson et al. teaches generally that biaxially oriented polypropylene films have advantageous properties, Robinson does not teach optimization of these properties. The teaching of Robinson et al. is directed at what Robinson et al. identified as the problem of securely and firmly uniting the pressure-sensitive adhesive composition to the film. (col. 2, ln. 52-56). Robinson et al. describes surface treatment techniques and teaches that use of a particular formulation of adhesive results in firmly uniting the adhesive to the backing (col. 3, ln. 12-21).

Robinson et al. does not teach a specific desired melt flow for the resins. However, as correctly pointed out by Examiner, Applicant's statements at page 2 of the specification do state that such films, like those disclosed in Robinson et al., are produced typically with so-called film grade isotactic polypropylene resins having high molecular weight and low melt flow rates between about 2-8 grams/10 minutes as measured using ASTM D 1238-955.

Because Robinson et al. is not directed at optimizing film properties, one of skill in the art would not recognize that Robinson et al. would teach use of a melt flow resin beyond what was typically used (2-8 grams/10 minutes). Further, even with a combination with Applicants' statements, the specific disclosure of biaxially oriented substrate having a melt flow rate greater than 8 grams/10 minutes is not taught or suggested.

Even with the combination with Wong et al. there is no teaching or suggestion of biaxially oriented substrate having a melt flow rate greater than 8 grams/10 minutes. Wong et al. only specifically teaches use of homopolymeric isotactic propylene resins having melt flow indices in the range of 0.7 to 4.0. Although, Wong et al. does state that it is expected that tape backing could also be made from resins having melt flow indices outside that range, nowhere, including the Examples, does Wong et al. disclose a melt flow greater than 8 grams/10 minutes, which as identified by Applicants' statement would be beyond the typical range.

The present applicant has identified that it is desired that severed tape does not chip, sliver, fracture or break in an unpredictable manner and that severability is governed primarily by the mechanical properties of the backing of the tape. Tape backing can include various combination of resin and other components to improve processing, severability, or generally

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physical properties. Tape backings can be stretched under various processing conditions and parameters, which affect the tape backing physical properties. Modification of the backing composition or modification of processing conditions does not necessarily result in predictable changes to the backing physical properties.

Therefore, it is not as straight forward as extending the teaching of Wong et al. to utilize a biaxially oriented substrate having a melt flow rate greater than 8 grams/10 minutes. Would use beyond the melt flow specifically disclosed in Wong et al. also achieve the claimed tensile elongation to break? Applicant has identified a particular backing of biaxially oriented polypropylene film that achieves desired results (tensile elongation to break to name one) by use of a biaxially oriented substrate having a melt flow rate greater than 8 grams/10 minutes.

The prior art does not specifically disclose a melt flow rate in the claimed range and therefore independent claims 1, 3, and 30 are not anticipated by the prior art. Additionally, a *prima facie* case of obviousness has not been made. The prior art does not teach a combination to achieve the desired film properties through use of a biaxially oriented substrate having a melt flow rate greater than 8 grams/10 minutes. Further, even with a combination of references such a melt flow rate is not disclosed. Therefore, independent claims 1, 3 and 30 are not made obvious by a combination of the cited references. Claims 2, 4-29, and 31-59 depend therefrom and are also patentable over the cited references.

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested.

Respectfully submitted,

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